

NORTHERN ILLINOIS APPLE USERS GROUP

VOL. 2, NO. 6

FEBRUARY 1981

THE HARVEST FEATURE ARTICLE

WHY I LIKE PASCAL.
IN ?
EASY LESSONS

By Herb Schulz

Programming in any language is kind of a test of our own ability to logically sort out ideas into their simplest form. These simple ideas then form instructions to the computer and it carries them out like the dumb slave it is. (I wonder if people are afraid of learning how to program because they believe that the machine is secretly laughing at them? They should remember that they can just pull the plug on it: I've done it several times and it really feels good!)

It turns out to be very tedious to have to work at the machine's level and still get somewhere at a reasonable speed. High level languages (such as BASIC, FORTRAN, COBOL and Pascal) are used so that we can write our programs using more abstract ideas than those directly understood by the computer.

After writing down our ideas in the high level language we then depend upon an interpreter or translator (i.e. compiler) to convert the abstract statements into a series of very simple, machine understandable, instructions. It is the efficiency of this translator that will determine how fast the final translated program will run.

We see that the ability of a high level language to capture our ideas on a human level is its principle reason for existing. As an example of the ability to program in an abstract fashion let us write the very beginning of a game program:

```
PROGRAM GAME;  
  BEGIN  
    INITIALIZE;  
    PLAYGAME  
  END.
```

It is obvious that this is not a finished program; after all, what are INITIALIZE and PLAYGAME? What has been done here is to break the game into two simpler parts: we must first set everything up (INITIALIZE the variables like the board or the cards) and then we can play the game.

This allows the programmer to set aside the complexities of each individual part of the complete task. The tough stuff is pushed into the subroutines (PROCEDURES in Pascal. Here there are two: INITIALIZE and PLAYGAME). But we can continue to play this game with the subroutines: i.e. deal with them in the same fashion as we dealt with the program itself. For example, in PLAYGAME we might write:

PROCEDURE PLAYGAME;

```

BEGIN
  REPEAT
    YOMOVE;
    COMPUTEMOVES
  UNTIL (GAMEOVER OR QUIT)
END;
```

Now we finally sit down and write the PLAYGAME part of the program. But the same 'trick' is used again: i.e. PLAYGAME consists of REPEATED moves by you and then the computer UNTIL the game is over or you want to quit. We just broke up the abstract

idea of playing the game into two simpler (not simplest by any means) concepts: you moving and the computer moving. In addition we will later have to define what is meant by GAMEOVER and QUITting.

Using this method (known in computerese as 'The method of successive refinement') we continue to define each abstract idea into simpler (but still possibly abstract)

ideas until the complete program is written.

For simple programs this technique is not necessary (although it can't hurt). It becomes important when longer and/or more complex and abstract programs are being written.

This method of program development can be used for programming in any language, including BASIC. As can be seen in the examples above, successive refinement is the natural (underlined) method of programming in Pascal. It is this 'property' of Pascal that has made it my language of choice for all programming needs; from low level bit fiddling to major graphics work.

Writing programs out in Pascal can even be useful to those who want to get their 'logic' straight for a BASIC or ASSEMBLER program.

One of the reasons Pascal works so well on the human thought level has to do with the way it deals with variables. It is one of the few languages that allows the user to make up new types of variables that fit the individual needs of the program. A beginning discussion of variables in Pascal will start in a future issue of Harvest. I hope you'll wait.

I'll be seeing you.

CES REPORT

Dave Alpert

I had the pleasure of spending three days attending the International Apple Core meetings a few weeks ago. At the same time, the Consumer Electronics Show was being held next door. This was no coincidence. Most of those attending the meetings are not just APPLE nuts, but also electronic junkies.

This show is held semi-annually; in the summer it is here at McCormick Place and in the winter it is held in Las Vegas.

The winter version is somewhat anticlimactic coming so soon after Christmas while the summer show is the showcase for the push of new merchandise for the holiday season. Nonetheless, I find these shows fascinating. Since the IAC meetings were held all day Saturday and part of the day Sunday, I had only limited time to visit the CES exhibits. Crowds were large and spending much time at any one booth was difficult.

The computer industry was sparsely represented. Commodore was there showing their new color computer. APF, Atari and Mattel also showed their newest entries.

CONTINUED ON PAGE 7

NSAUG LIBRARY NOTES

by
George Makas

Last month, Mr. Apple responded to Concerned Member's questions regarding his problems with NSAUG library programs. Mr. Apple pointed out that all programs are contributed and cannot be expected to be of the same quality as commercial grade programs. Having said this, Herr Apple points out a few things that can be done to run 'unrunnable' software. First the user may have to obtain hardware essential to operating a program, such as the "Programmer's Aid #1". Next he mentions problems solved by entering the direct command "himem:16384". The article directs itself to a discussion of limitations caused by inadequate memory capacities on programs requiring HIREs screen and second page access. I hope I have whetted your appetite sufficiently to cause you to consult page 9 of the November, 1980 HARVEST to straighten out some of the problems you have been sharing with Concerned Member.

Volume 1 of the NSAUG library is made up of games. All of them ran for me except ELIZA(GL). I encountered an I/O ERROR when I called for the program. Many of the programs have been contributed by members. Mike Robins contributed HANGMAN a very fine educational program, presumably adapted from a commercial board game. It is easy to operate, requiring the entering of a single letter and only occasionally requiring the return key. You can add your own words by modifying the appropriate lines. Mike contributed the BLACKJACK game that requires no stake to play.

TIC-TAC-TOE was a no win and no lose game for me. The NUMBER GUESSING GAME was interesting for a while, although the teacher in me was annoyed by some misspellings. DR. Z and the two ELIZAS are

psychological" games, offering to help the user solve his "problems." CRAPS runs well, but annoyingly goes back too far in the program. The fix is to retype line 420 changing the goto statement to read 85.

BATTLESHIP at first is an interesting and challenging game. It gets boring after you keep winning. The program could be tightened up so that the computer could follow up on its successful shots. I should have been sunk and defeated the last time I played it; however, the computer wasted a lot of shots after it had scored some hits on some of my ships.

MONOPOLY is a contributed program from the Grand Rapids Computerland store. The program admits to having some faults. One major fault is that I was able to operate with a negative cash stake, which is not allowed in the board game.

DRAGON is a colorful challenging game which utilizes an invisible maze. This game is the red book version, the one written in the red manual that came with the APPLE II--a mimeographed edition. SWORDS AND SORCERY (two versions) is a text adventure game.

Two popular games, YAHTZEE and POKER wind up the disk. the former game requires more than one player, since the computer is not programed to be an adversary as the one is in the Apple Contributed programs, Volume 1.

I am sure that you have had some interesting experiences with some of the programs in our library. Why not share your experiences with the rest of the membership by dropping me a line. I will be glad to relate your experiences in my column.

CLUB OFFICERS

President: Dave Alpert—312-295-6078
 Vice Pres: Guy Lyle—312-438-7941
 Treasurer: Jim Wilson—312-358-2196
 Librarian: Jim Pfeiffer—312-289-7311
 Prog. Crm: Ken Rose

Club Addresses:

MEMBERSHIP, etc.—BOX 787

Palatine, Il. 60067

NEWSLETTER—Terry Tufts,
 1015 S Ridge Ave,
 Arlington Heights, Il.
 60005
 312-392-7735

BULLETIN BOARD—312-295-6926 daily
 as available and after
 10:30pm local time

Membership is open to all. Dues are \$12.00 annually. New members are required to supply one disk or cash equivalent (\$5.00) at the time of admission to the club. Disk is not required for renewals. Membership applications are available from the club Secretatary at the meetings or by mail.

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MEETING SCHEDULE

Regular Meeting Sat February 7
 Sat March 1
 April 4 *
 * tentative

Officers meetings are held at the President's home on the Tuesday evening following the regulary scheduled meeting starting at 7 pm.

Regular meetings are held at Schaumburg Library,

MEMBERS AIDE

The members listed below have volunteered to answer questions from club members who need a 'HOT LINE' type approach. Please try to be brief when you call as a courtesy to them. Listed below are the names and phone numbers. The numbers after their names represent their special talent. PLEASE-no calls after 10 pm.

Earl Allen—312-837-9259 1-9
 Paul Stadfeld—312-359-2378 4-9
 Guy Lyle—312-438-7941 4-9
 Ted Roseman
 Mary Roseman—312-338-4833 2,3
 Joel Kurash—312-677-8358 9
 Leon Alexander—312-725-5309 9
 Gordon Banks—312-324-6194 0
 Rich Lundeen—312-420-2008 2,3

Mach. lang=1 Int. Basic=2
 Applesoft =3 Hardware =4
 Arrays =5 DOS =6

all of above=9

PASCAL=0 (is not included in 9 designation)

When numbers appear before a 9, the person is especially qualified in that area as well as in all other areas.

TREASURERS REPORT

Month ending December 31

November Ending bal.	\$1,476.65
Membership 30 new	
52 renew	1,104.00
Newsletter	<266.88>
Disk Project	530.50
Expenses:Includes partial	
February Social	
prepayment	<206.64>
December Ending Balance	\$2,637.63

Respectfully submitted,
 Jim Wilson, Treasurer
 January 5, 1981.

VISICALC

Many of you use Visicalc quite regularly and might be interested in knowing about new developments, applications or related products that support or tie into Visicalc. If so, you may want to subscribe to a Newsletter that is devoted completely to that subject. For more information write:

SPREADSHEET,
 Visigroup,
 PO Box 1010,
 Scarsdale, NY, 10583.

SECRETARY'S REPORT

Meeting of January 3, 1981
Attendance: 155

The meeting was called to order at 10:00 a.m. by President Don Fuller. After reports from each of the officers, the election of new officers was held. The results are as follows:

President:	Dave Alpert
Vice-President:	Guy Lyle
Secretary:	Joel Kurasch
Treasurer:	Jim Wilson
Librarian:	Jim Pfieffer

The proposed constitution was also approved. The new officers will be installed at the next general meeting.

There then was a explanation by representatives of Bell & Howell of their in home repair service being offered. The service is provided either on a maintainance contract or a per call basis. When a call is placed to the service, a repairman will arrive within 24 hours and fix the machine on location. Bell & Howell is working in close cooperation with the Apple Computer Company to train the service personnel on all equipment sold by Apple.

Herb Schulz then gave a talk on the advantages of programming in Pascal. Using turtle graphics, he demonstrated the recursive nature of the language, and how this could be used for effective programming techniques.

Chuck Anderson then discussed the latest in game software available. Game fans should bear in mind that the 14 disk set of the World of Eamon, will soon be in our library, for our members.

Finally, Mr. Apple (Mike Robins) answered a variety of general questions about the Apple computer and it's use.

The meeting was adjourned at 1:00 p.m.

OFFICERS MEETING

January 6, 1981

The use of Harper College as a meeting

place is being finalized. It is hoped that the club will be able to meet there by the March meeting. There will be a nominal charge for the use of the facilities there, but their quality (and size) will be well worth the cost. The exact time and place of meetings will be announced at least a month in advance.

Membership now stands at 220. This despite the fact that 45 of our 1980 members did not renew.

In conjunction with the change in the name of the club, club monies are being transfered to an interest bearing account. (See Treasurer's report for detail of club finances.)

The club has placed on order, as approved by the membership, a disk drive for the Librarian to use. There is some concern that the duties of the office might be getting unmanageable, as the disk library grows, as well as the size of the paper library. Librarian-elect Jim Pfieffer will be concentrating his efforts in organizing his office so it may continue to meet the needs of the club, as both the membership and the library material increase in size.

The details of the transfer of responsibilities to the new administration were discussed, and it is anticipated that there will be a minimum of problems.

Respectfully submitted,
Joel Kurasch
Secretary

FEB
AGENDA
FEB 17, 1981

10:00-10:30 am	Opening Remarks (Don Fuller)
10:30-10:45 am	Installation of Officers
10:45-11:15 am	DOS Entry Points (Mark Pump)
11:15-11:30 am	Break
11:30-12:00 am	World of Eamon (Ron Unrath)
12:00-12:30 pm	Copying Uncopyable Disks (Debate) (Jim Wilson & Ken Rose)
12:30-12:55 pm	Questions and Answers (Mr. Apple)
12:55- 1.00 pm	Closing Remarks

PREZ SEZ!

Our thanks to the gentlemen from Bell and Howell for the presentation on the services available, to Herb Schulz and the audience participants.

February's meeting will complete my year in office-(I spent an entire decade as President of "NSAUG" one year).

I want to thank everyone for your support, attention, Interest and constructive comments during the past year. Special thanks to the members who attended the officers meetings and offered their time and talents to make the regular meetings such great successes. My personal thanks to each person who shared his (her) knowledge with the group.

Special thanks to the officers who capably did their jobs...and Dave Alpert for riding herd on the newsletter and Ken Rose for putting together the programs and the talented group of people who volunteered for the hotline-

I'm working on one more project for the club that I feel very strongly about. The new members need a packet of information when they join, so that they can get underway with their Apple and become involved in the club. I'm sure that you remember the consternation you felt when attending your first meeting and becoming aware of the power of the Apple. An information packet may serve to alleviate some of the apprehension of newcomers and help to get them off to a good start with the "Northern Illinois Apple Users Group".

Before I get too verbose, I would like to reiterate that the club is operated by volunteers-your continuing support is required to maintain the highest of standards and I'm sure your assistance will be appreciated. The more you put into the club, the more you'll get out.

1980 has been a good year. A lot of growth for the club and some tremendous information shared. I wish the best to the new officers for 1981 and to all the members.

My thanks to one and all.

Don.

MORE PASCAL

Ever wonder what was in the PASCAL character set when using Turtle-graphics? Here is a primer that will display all characters on your hi-res screen.

PROGRAM LOOKIT;

```
(*
  DISPLAYS ALL CHARACTERS
  IN THE TURTLEGRAPHICS
  CHARACTER SET
*)

USES TURTLEGRAPHICS;

VAR I,J: INTEGER;
    A: STRING[1];

BEGIN
  J:= 100;

  (*
    INITILIZE THE VERTICAL
    POSITION FOR STARTING LINE
  *)

  INITTURTLE;
  MOVEIO(0,J);

  (*
    PUT THE TURTLE 100 UNITS
    UP AND 0 UNITS LEFT ON
    HI-RES SCREEN
  *)

  CHARTYPE(6);

  (*
    NO MATTER WHAT YOU HAVE
    ON THE SCREEN, THE
    CHARACTER WILL SHOW UP
  *)

  FOR I:= 0 TO 127 DO

  (*
    REMEMBER, 128 IS THE
    MAXIMUM NUMBER OF
    CHARACTERS!!!
  *)

  BEGIN
    WCHAR(CHR(I));
    IF I MOD 40 = 0 THEN

  (*
    DROP DOWN A LINE AFTER
    WRITING 40 ACROSS THE
```

CONTINUED ON PAGE 8

EDITORIAL

Terry Tufts

A brief perusal of past issues shows me that the articles in Harvest have been mostly been contributed by a very select few. Apparently many of you loyal readers are shy or don't feel your knowledge is worth sharing. I would like to publish articles that appeal to every level and believe that many new members have or will be solving problems that would be worthwhile sharing with others. Many problems are caused by very poor documentation. This is a continuing problem that will likely be with us forever. If you have had a problem you can be sure that many others will have the same problem and would like to know how it was solved. How about sharing your experience or knowledge with your fellow club members.

Feel free to bounce your ideas off me. I will tell you if they have been used or if I think they would make a useful article. Also if you have complaints, suggestions etc. send them in and see if we can get a little controversy going.

ARTICLES WANTED

Reviews of: new games, programs (Database management Systems, other business programs), Hardware (Z80 card, 80 column cards, monitors, lower case adapters etc.), languages (Forth, Fortran, Pascal etc.), operating systems (CPM, APPLE DOS etc.). With 200+ members we can have a lively and interesting new year.

FROM PAGE 2

None impressed me as they all represent less compatibility to peripherals than their upgraded versions or our APPLE.

I saw the Sinclair < \$200 computer. Cute and compact, I think it will sell a lot of APPLES. Once you have used it, you will want a real computer.

Quasar and Panasonic showed their 'computer in a briefcase'. Small and thin these units will interface via modem to other devices and perform in many different environments. Imagine doing high level computing at 35,000 feet. I hope they have licked the RFI problem better than APPLE.

TI was there trying to rid themselves of an overstock of non-selling personal computers. Bally was still trying to sell their Arcade game as a computer. Some folks will never learn.

The most impressive personal computer I saw was the NEC from Japan. This machine

is expected to give APPLE their biggest competition. They also showed a 7" TV that is NTSC compatible so it will work with the 80 column APPLE ///. I was very impressed with the sharpness and detail.

For those interested in satellite TV reception, there were no less than 7 dish manufacturers displaying their wares. The best looking system was from Downlink and was a small (by comparison) mesh screen that picked up signals better than the 3 meter and 5 meter dishes. With just 8' they wiped out the competition. To top that, they were priced at 50% of their competitors' prices.

For those who don't want to spend \$4000 on a satellite dish, there were all the video disk (note: disk not dish) formats represented. They sure know how to confuse the public. Laser this and electronic that, they are making the issue of format worse than Beta, VHS and the old Quasar tape formats are. One good thing that seems to be occurring because of the low price of video disks is that the prices of video tape machines seems to be coming down some.

After seeing row after row of telephone devices, health care products, radar detectors, video tape distributors (and some of their actresses), the audio and video hardware manufacturers' displays were somewhat anticlimactic. Most impressive were Akai's portable video recorder that does all that the big machines do and Sony's stereo headset that weighs less than a boloney sandwich.

Now, on to the National Computer Conference and the Small Computer Show.

IAC MEETING UPDATE

On January 10th, I met with the Directors of the International Apple Core to describe my plans for the annual meeting to be held here May 2nd and 3rd.

It was agreed that the meetings would be held at the Marriot O'Hare. There will be a business meeting on Saturday May 2nd and seminars Sunday May 3rd. Both sessions will be open to the public.

In the next few weeks, final plans will be made. Anyone having any input should contact me immediately. Ideas regarding speakers and general IAC subjects would be appreciated.



ASK MR. APPLE

Mr. Apple:

What are the advantages of having a dual disk drive system. Before buying a second disk drive, what extra training in programming is required?

There are a few question that must be asked before I can answer this question. The first one is what language do you plan to program in? The second question is what application do you plan to run on your Apple computer. If the answer to the first question is Pascal, then I would

definitely say that a second drive would be needed to make the system usable for most applications.

Although Pascal can run with a single drive, it does have severe limitations when used in this configuration. If your programming language is to be BASIC, then it is very important to ask what application your computer will be put to. If you plan to use it at home for games and educational purposes, then a single disk drive will probably be sufficient. If on the other hand you elect to use the Apple for a business application, you would have to take a close look at how much data you need to have access to at one time. A second disk drive really only buys you more storage space. If for example, you need to keep a large inventory program, and data on line for your business, I would suggest having a second disk drive to handle the large amount of data. Many pieces of software keep the programs on one diskette, and the data on the second diskette.

As far as your question as to what new programming techniques you might need to learn, my answer would have to be simply learning that the second drive is

accessed by specifying ,D2 when accessing that second drive. There are really no other major changes that you would need to make to your programming techniques.

Mr. Apple

FROM PAGE 8

SCREEN...

*)

BEGIN

J:= J - 10;

MOVETO(0,J);

END;

END;

READLN(A);

(*

HOLD THE PAGE WHILE

LOOKING AT THE

CHARACTERS ON THE

SCREEN UNTIL YOU

PRESS "RETURN"

*)

END.

For you non-PASCAL users, the "(*" and "*)" set off comments in a PASCAL program. The compiler overlooks the statements between them.

PASCAL PETE....

WANT ADS

FOR RENT (NO CHARGE) This space for rent at no charge to club members for their ads. Buy, sell or swap computer related items. Simply send your ad to The Editor c/o this newsletter.

For sale

1. 1-Trendcom-100 printer with interface card-\$325.

2. 1-Videx 80 column adapter-\$300.

3. 1-9" Black and white TV with M&R Sup"R"mod II-\$60.

4. Programmers Aid #1 Chip-\$35.

Call Joel 677-8358 evenings till 10. Any unsold equipment will be brought to the meeting February 7.

WANTED TO BUY

DOS 3.3 ROM chip.

Call Terry at 392-7735

Preamble: We the members of the Northwest Suburban Apple Users Group do organize for the purpose of sharing knowledge and learning regarding personal computers in general and the Apple Personal Computer specifically.

CONSTITUTION



Article I Name

The name of this organization shall be "Northern Illinois Apple Users Group."

Article II Purposes

Section 1. The objects of this organization are:

- A. To promote the dissemination of information concerning the Apple Computer and products related thereto.
- B. To share the knowledge of members at large concerning their talents and information pertaining to computers and the Apple Computer specifically.

Article III Basic Policies

Section 1. The following are basic policies of this organization:

- A. The organization shall be noncommercial, nonsectarian and non-partisan.
- B. The name of the organization or the names of any members in their official capacities shall not be used in connection with a commercial activity or with any partisan interest or for any purpose not appropriately related to promotion of the purposes of the organization.
- C. It is the policy of this organization to protect the interest of copyright holders.

Article IV Membership and Dues

Section 1. Membership in this organization shall be available without regard to race, age, color, creed, gender or national origin.

Section 2. Any individual who subscribes to the purpose and basic policies of this organization may become a member of this organization. Members in good standing shall be those members who abide by the organization's constitution and bylaws.

Section 3. The membership year shall be from January 1 to December 31 inclusive. Each member shall pay annual dues as provided in the bylaws.

Section 4. Any member in good standing of this organization shall be eligible to participate in business meetings, or to serve in any elected office.

Article V Board of Directors

Section 1. The Board of Directors shall be those officers currently elected to office and the past year's president, if not re-elected.

Section 2. If the president is re-elected, the past year's vice-president shall become a member of the Board of Directors.

Article VI Duties of the Board of Directors

Section 1. The Board of Directors shall:

- A. Meet quarterly, beginning in the month after general elections are held or as necessary.
- B. Maintain the continuity of this organization and make long range plans for the organization's continuance.
- C. Resolve any disputes concerning a member's good standing.

Article VII Officers and Their Election

Section 1. The officers of this organization shall be a president, vice-president, secretary, treasurer and librarian.

Section 2. Election of all officers shall be by ballot. The election shall be held at the regular meeting in January.

Section 3. Officers shall assume their official duties upon installation at the February regular meeting.

Section 4. A term of office shall be for one (1) year.

Section 5. A vacancy occurring in any office shall be filled for the unexpired term by a member appointed by the president and approved by a majority of officers.

Article VIII Duties of Officers

Section 1. The president shall:

- A. Preside at meetings.
- B. Set location and dates of monthly officers' meetings.
- C. Designate committees as needed and appoint committee chairmen.
- D. Appoint a program chairman and newsletter editor.
- E. Conduct an annual audit of the finances of this organization within 60 days of the organization's year end.
- F. Perform such other duties as his office may require.

Section 2. The vice-president shall:

- A. Assist the president in the performance of the president's duties and perform those duties in the absence of the president.
- B. Become president in the event a vacancy occurs in the presidency.
- C. Perform such other duties as his office may require and as the president may request.

BYLAWS

Section 3. The Treasurer shall:

- A. Be responsible for all funds of the organization.
- B. Receive and disburse all monies, subject to the direction of the president.
- C. Prepare or have prepared a year-end financial statement which shall be available to the membership of the club's accounts, property and equipment.
- D. All disbursements shall be supported by voucher or receipt. Three officers shall have access to the organization's bank account.
- E. Keep and make available to members accountings of the financial transactions of the organization.
- F. Perform such other duties as his office may require and as the president may request.

Section 4. The secretary shall:

- A. Inform members in a timely manner of the place and time of monthly regular meetings and officers' meetings.
- B. Prepare, or have prepared, minutes of all meetings.
- C. Maintain a listing of members.
- D. Keep and make available to members the organization's correspondence.
- E. Perform such other duties as his office may require and as the president may request.

Section 5. The librarian shall:

- A. Maintain on appropriate media such programs and material which have been lawfully obtained by the organization.
- B. Make such programs and material available to members in good standing in accordance with procedures established by the current officers.
- C. Provide such records as requested by the treasurer.
- D. Perform such other duties as his office may require and as the president may request.

Article XIX Meetings

Section 1 Regular membership meetings shall be held monthly on a date scheduled by the officers.

Section 2. Officers' meetings shall be held as provided for in Article VIII, Section 1, Paragraph B. Such meetings will be announced at the regular meeting preceding the officer's meeting.

Article X Amendments

Section 1. The constitution and bylaws may be amended only by the submission in writing of a proposed amendment to an officer at any time. Such proposal shall be furnished to every member of record in writing and shall be acted upon at the regular meeting following the next scheduled regular meeting, provided there be a quorum present. If no quorum shall be present, the amendment shall be considered at the next meeting at which there is a quorum.

Section 2. Subject to the provisions of Article X, Section 1, a two-thirds majority of the members present at that meeting or responding by mail prior to that meeting shall be required to accept or approve an amendment.

Article I Membership

Section 1. A membership in this organization by one member of a household may include all members of that household as one member.

Section 2. Dues and initiation fees shall be set by two-thirds (2/3) of the officers. Any proposed dues changes will be announced in writing and approved by a majority of the membership at the next regular meeting.

Article II Officer Qualification(s)

Section 1. To be eligible for elected office, a person must be a member in good standing.

Article II Quorum

Section 1. A quorum shall consist of a minimum of 20% of the members in good standing.

Article III Software Library

Section 1. The Software Library shall consist of computer programs purchased by the organization or donated by members for use of other members of the organization.

- A. If purchased or donated programs are copyrighted, the holder of the copyright must agree, in writing, that said program may become a part of the organization's library.

Section 2. Any member in good standing may have access to all programs and materials residing in the organization's library for his personal use.

Section 3. A member may not sell, trade or loan any program or material he received from the organization's library.

Section 4. The organization may, with written approval from the president, trade non-copyrighted programs in the organization's library with other clubs, groups or organizations.

Article V Members in Good Standing

Section 1. Members in good standing shall be those members who abide by the organization's constitution and bylaws.

Article VI General Provisions

Section 1. In the event of dissolution of the organization, any assets shall be disbursed in a manner agreeable to a quorum of the remaining members.

Section 2. Property or equipment of this organization, including the library and material shall be group property.

Section 3. Any expenditure with the exception of disk purchases for library purposes over five hundred dollars (\$500.00) shall require prior approval of a majority of the members present at a regular meeting.

Section 4. The fiscal year shall be from January 1 to December 31, inclusive.

Please fill out and give (or mail) top copy to the club librarian with the proper fee. If mail order, enclose check only. NO CASH. Indicate the volume numbers of the disk you want below.

[illegible]

Date ordered _____

Total no. of disks ordered_____

* Librarian's use only *

* \$3.50 = \$

Date (ready-mailed) _____/_____/_____

Mail svc.* \$1.50/ = \$

() Cash () Amount \$ _____

Total enclosed \$

Name (please PRINT)	Address
----------------------------	----------------

City _____ State _____ Zip _____

***** TEAR HERE *****

This copy for your records.

Copy 2

Disks ordered:

[illegible]

Date submitted _____ Amount paid _____

4. GAMES

Ron Unrath 312-438-4799

5. GRAPHICS

Helen Tufts 312-392-7735

Eric Stral 312-885-1941

2. STOCKS AND FUTURES

Jerry Guerin 312-945-2624

3. EDUCATION

Helen Tufts 312-392-7735

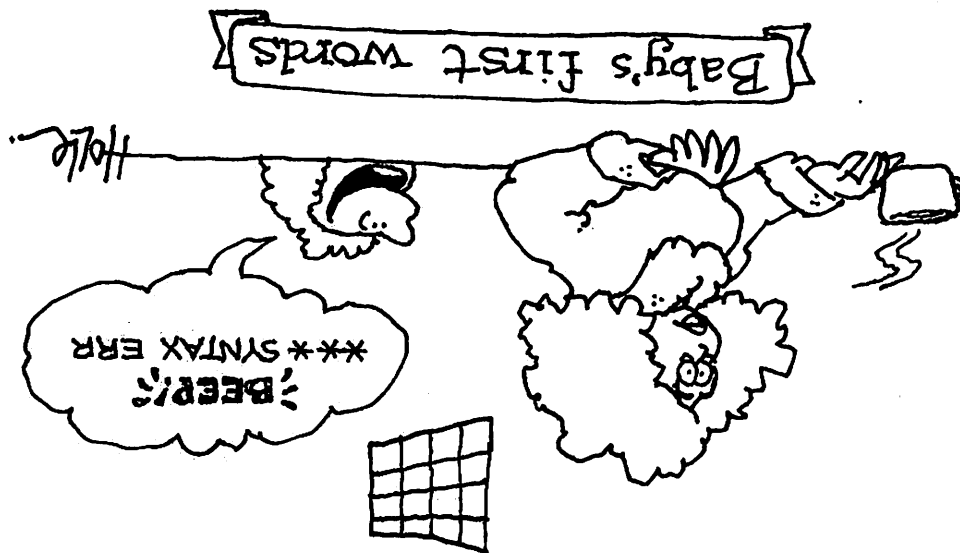
6. POTENTIAL SIGS

There are several other SIGS that were considered but didn't quite get off the ground. These were:

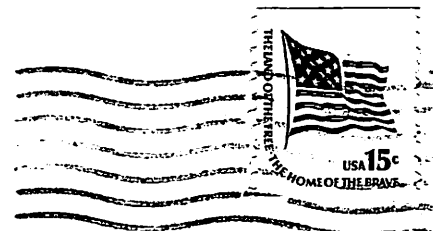
HARDWARE

BEGINNERS

If you are intersted in these or starting any other categories give the Editor a call and I will put you in touch with any others of like interests.



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